REMARKS

The present Amendment amends claims 1 cancels claims 2, 3, 7, 8,

17, and 18, and leaves claims 4-6, 9-16, 19-23 unchanged. Therefore, the

present application has pending claims 1, 4-6, 9-16 and 19-23.

Interview Summary

Applicants thank the Examiner for providing recommendations

regarding proposed amendments to claims 1, 6 and 16 in the Interview

Summary mailed on February 8, 2007, and for attempting to contact

Applicants to conduct an interview. However, it should be noted for

clarification of the record that no interview was conducted. Nonetheless,

Applicants have considered the Examiner's recommendations, and have

amended the claims in accordance with the Examiner's recommendations.

35 U.S.C. §101 Rejections

Claims 1-23 stand rejected under 35 U.S.C. §101 as allegedly being

directed to non-statutory subject matter. As indicated above, claims 2, 3, 7, 8,

17, and 18 were canceled. Therefore, this rejection regarding claims 2, 3, 7,

8, 17, and 18 is rendered moot. Regarding the remaining claims 1, 4-6, 9-16,

and 19-23, this rejection is traversed for the following reasons. Applicants

submit that claims 1, 4-6, 9-16, and 19-23, as now more clearly recited, are

directed to statutory subject matter. More specifically, Applicants have

amended claim 1 to include the features of claims 2 and 3, amended claim 6

to include the features of claims 7 and 8, amended claim 16, to include the

features of claims 17 and 18, and have further amended claims 1 and 16 to

included the "sending" feature of claim 6, as proposed by the Examiner in the

Interview Summary. Therefore, this rejection is overcome and should be withdrawn.

35 U.S.C. §112 Rejections

Claims 1, 6 and 16 stand rejected under 35 U.S.C. §112, first paragraph as allegedly failing to comply with the written description requirement. Specifically, the Examiner asserts that the phrase "generated from a previous search of a document database¡" was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors had possession of the claimed invention.

This rejection is traversed for the following reasons. The phrase "generated from a previous search of a document database¡" refers to a feature of the present invention that allows a database that is to be searched next to be selected from a list of document databases that have been appropriately rearranged in accordance with a search result (*see, e.g.*, page 15, line 36 to page 16, line 5). This use of historical search results is described throughout the specification (*see, e.g.*, the Abstract and page 14, lines 8-18). In this way, the claim language is clearly supported by the specification.

Accordingly, Applicants submit that claims 1, 6 and 16 are in compliance with the provisions of 35 U.S.C. §112.

Claim Objections

Claims 1, 6, 10-16 and 21-23 stand objected to due to informalities noted by the Examiner. Amendments were made to claims 1, 6, 10-16 and 21-23 to correct the informalities noted by the Examiner. Therefore, this objection is overcome and should be withdrawn.

35 U.S.C. §102 Rejections

Claims 1-3, 6-18 and 21-23 stand rejected under 35 USC §102(b) as being anticipated by U.S. Patent No. 5,454,105 to Hatakeyama. As indicated above, claims 2, 3, 7, 8, 17, and 18 were canceled. Therefore, this rejection regarding claims 2, 3, 7, 8, 17, and 18 is rendered moot. Regarding the remaining claims 1, 6, 9-16, and 21-23, this rejection is traversed for the following reasons. Applicants submit that the features of the present invention as now more clearly recited in claims 1, 6, 9-16, and 21-23 are not taught or suggested by Hatakeyama whether taken individually or in combination any of the other references of record. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

Amendments were made to each of the claims so as to more clearly describe features of the present invention. Specifically, amendments were made to the claims so as to more clearly recite that the present invention is directed to a document search system, a search server for mediating between a search client and a plurality of document databases, and a document search method for instructing a document search as recited, for example, in independent claims 1, 6 and 16.

The present invention, as recited in claim 1 and as similarly recited in claims 6 and 16, provides an associate server that is capable of instructing a document search by specifying a document database j to be searched next among a plurality of document databases, based on a search result generated from a previous search of a document database i. Further, according to the present invention, an associate search recording table is provided which records the number of times x_{ij} of searching the document database j based

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on the search results generated from the previous searches of the document

database i. The present invention also includes a means for sending a search

result of the specified document database to a search client, and a means for

changing a showing order of document databases to be searched by using

data from the associative search recording table. According to the present

invention, a different associative search recording table is stored for each

user. By using the different associative search recording table for each user,

a showing order of document databases to be searched is changed according

to the user.

Thus, as per the features of the present invention, for example, as

described in the passage of the present application beginning on page 8, line

32 through page 10, line 10, the associate search recording table stores

therein information for tracking the number of times of searching a second

database based on the search results generated from the previously

conducted search of a first database. Therefore, the present invention is

intended to address a situation wherein the order of document databases to

be searched next is determined using the tracking information stored in the

associative search recording table regarding searches conducted in

databases that are searched prior to searching the next database.

For example, according to the present invention, a search for a

particular type of document is set using a keyword and the search is

conducted in a first database which retrieves documents related to the

keyword. Thereafter the documents retrieved are used to search a second

database with good results. Next, the associative search recording table

records (tracking) information so as to indicate the number of searches that

are performed using the first database and then the second database.

According to the present invention, such tracking information being stored in

the associative search recording table is used by an associative server when

conducting a search to specify the next database within which a search is to

be performed. This tracking information stored in the associative search

recording table improves the results of the searching operation relative to

conventional systems. This feature of the present invention also allows for

the appropriate calculation of fees for the use of the databases where certain

databases are more useful in searching when combined with other databases.

All of the above described features of the present invention are not taught or

suggested by Hatakeyama whether taken individually or in combination any of

the other references of record.

Hatakeyama discloses a document information search method and

system. However, there is no teaching or suggestion in Hatakeyama of the

document search system, the search server for mediating between a search

client and a plurality of document databases, or the document search method

for instructing a document search as recited in independent claims 1, 6 and

16.

Hatakeyama teaches a document information search method and

system that reduces the wait time in the event that a plurality of search

requests are sent to a search device simultaneously by executing the multiple

search requests simultaneously — namely in parallel. In Hatakeyama's

method and system, when a search request is received in the course of

executing a search processing for an earlier prior search request, the former

is stored in a queue buffer. When a plurality of search requests has been

stored in a queue buffer in this manner, a search processing is performed for the plurality of search requests simultaneously as stored. The results of search processing as performed are then output to the relevant search request sources, respectively. Output buffers for storing a set of search results of the searches performed in the past may be provided in correspondence to the search request sources, respectively, for screening the documents for which the character string search is to be performed.

One feature of the present invention, as recited in claim 1 and as similarly recited in claims 6 and 16, includes an associate server that is capable of instructing a document search by specifying a document database j to be searched next among a plurality of document databases, based on a search result generated from a previous search of a document database i. Hatakeyama does not disclose this feature. To support the assertion that Hatakeyama teaches this feature, the Examiner cites Figs. 4 and 5, the abstract, and column 6, lines 8-67. However, neither the cited text nor any other portions of Hatakeyama teach or suggest an associative server, as claimed. For example, as described in the abstract and as shown in Fig. 15, Hatakeyama teaches that when a plurality of search requests have been stored in a queue buffer, a search processing is performed simultaneously for the plurality of search requests, as stored. There is no disclosure of a performing a document search by specifying a document database j to be searched next from among a plurality of document databases, based on a search result generated from a previous search of a document database i, in the manner claimed.

In response to Applicants' arguments that Hatakeyama does not teach or suggest an associate server, as claimed, the Examiner asserts that Hatakeyama teaches where a set of search results containing the search terms of the search processing performed in the past may be provided in correspondence to the search request sources, citing Figs. 4 and 5, the Abstract, and column 6, lines 8-67. However, this feature is quite different from the features of the present invention. Providing a set of search results of search processing performed in the past to search request sources is not the same as specifying a document database j to be searched next from among a plurality of document databases based on a search result generated from a previous search of a document database i. Accordingly, Applicants respectfully disagree with the Examiner's assertions.

Another feature of the present invention, as recited in claim 1 and as similarly recited in claims 6 and 16, includes an associate search recording table that records the number of times x_{ij} of searching the document database j based on the search results generated from the previous searches of the document database i. Hatakeyama does not disclose this feature. To support the assertion that Hatakeyama teaches this feature, the Examiner cites Fig. 17, column 17, lines 10-28, column 1, lines 12-20, Fig. 22, and column 19, lines 47-60. However, neither the cited text nor any other portions of Hatakeyama teach or suggest an associative search recording table, as claimed.

The table as taught by Hatakeyama is a correspondence table indicating which database is stored in which server and which document has been hit by which search word. Thus, there is absolutely no teaching or

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suggestion in Hatakeyama of the associative search recording table as recited

in the claims wherein tracking information is stored indicating the number of

times of searching a second database based on the search results generated

from the previous searches of a first database and wherein the tracking

information is used for selecting the next database within which to perform a

search after searching in a preceding database as in the present invention.

Thus, the table illustrated in Fig. 4 of Hatakeyama is simply a table for

recording which documents have been hit by which keyword. Therefore, this

table as taught by Hatakeyama does not anticipate nor render obvious the

features of the present invention as now more clearly recited in the claims

regarding the associative search recording table.

Further, in Hatakeyama, col. 19, lines 47-60 simply teaches the above

described correspondence table which indicates which database is located in

which server. Thus, this teaching of Hatakeyama does not anticipate nor

render obvious the features of the present invention as recited in the claims

regarding the associative search recording table.

Still further, Hatakeyama teaches in col. 17, lines 40-55 a hierarchical

search wherein a beginning search is subsequently refined so as to conduct

sub-searches. This teaching of Hatakeyama does not anticipate nor render

obvious the features of the present invention as recited in the claims wherein

the associative search recording table is provided. According to the present

invention, the associative search recording table is provided so as to allow for

the associative server to select which of the document databases are to be

searched next due to the results of searching generated from the previous

searches of the document databases.

Hatakeyama also teaches in col. 2, lines 62-67 and in col. 3, lines 1-10 a method of processing a plurality of search requests at once by putting the search request in a queue. However, as is quite clear from the above, the present invention is not directed to organizing search requests in a queue but is instead directed to setting the order in which databases are to be searched based upon tracking information as to how the databases are used as a result of previously performed searches. Such features are clearly not taught or suggested by Hatakeyama.

Fig. 17 of Hatakeyama shows a result set management table for storing a number of bit lists that correspond to the number times a search has been performed. A row of document IDs in a set of the search results is represented as a search result bit list where "1"s are placed at positions for the document IDs for which documents are hit, while "0"s are placed at positions of the document IDs for which no documents are hit. This is quite different from the associative search recording table of the present invention.

In response to Applicants' arguments that Hatakeyama fails to teach or suggest an associative search recording table, the Examiner asserts that Hatakeyama teaches where the number of times of searching full text of documents containing a particular character string or strings from a document database or databases and the search result set is stored in the table. However, storing the number of times of searching full text of documents is not the same as storing the number of times of searching the document database j based on the search results generated from the previous searches of the document database i. Accordingly, Applicants respectfully disagree

with the Examiner's assertions that Hatakeyama teaches an associative search recording table, as claimed.

Yet another feature of the present invention, as recited in claim 1, and as similarly recited in claims 6 and 16, includes a means for changing a showing order of document databases to be searched by using data from the associative search recording table. Hatakeyama does not disclose this feature. To support the assertion that Hatakeyama teaches this feature, the Examiner cites column 19, lines 47-60, noting where "the ordering of database is displayed". However, neither the cited text nor any other portions of Hatakeyama, teach or suggest the claimed features. Specifically, a display of the ordering of databases is not the same as changing a showing order of document databases to be searched by using data from the associative search recording table, as claimed.

Still yet another feature of the present invention, as recited in claim 1, and as similarly recited in claims 6 and 16, includes where a different associative search recording table is stored for each user, and by using the different associative search recording table for each user, a showing order of document databases to be searched is changed according to the user. Hatakeyama does not disclose this feature. To support the assertion that Hatakeyama teaches this feature, the Examiner cites column 17, lines 4-55; column 10, lines 50-55; and column 1, lines 20-25. However, neither the cited text nor any other portions of Hatakeyama teach or suggest the claimed features. For example, Hatakeyama does not teach or suggest using a different associative search recording table for each user, and changing a

showing order of document databases to be searched changed according to the user, in the manner claimed.

Therefore, Hatakeyama fails to teach or suggest "<u>an associative server which is capable of instructing a document search by specifying a document database j to be searched next among a plurality of databases based on a search result generated from a previous search of a document database i</u>" as recited in claim 1, and as similarly recited in claims 6 and 16.

Furthermore, Hatakeyama fails to teach or suggest "<u>an associative search recording table which records the number of times x_{ij} of searching the document database j based on the search results generated from the previous search of the document database i</u>" as recited in claim 1, and as similarly recited in claims 6 and 16.

Further, Hatakeyama fails to teach or suggest "<u>means for changing a showing order of document databases to be searched by using data from said associative search recording table</u>" as recited in claim 1, and as similarly recited in claims 6 and 16.

Even further, Hatakeyama fails to teach or suggest "<u>wherein a different associative search recording table is stored for each user, and by using said different associative search recording table for each user, a showing order of document databases to be searched is changed according to said user</u>" as recited in claim 1, and as similarly recited in claims 6 and 16.

Therefore, Hatakeyama does not teach or suggest the features of the present invention as recited in the claims. Accordingly, reconsideration and withdrawal of the 35 USC §102(b) rejection of claims 1, 6, 9-16, and 21-23 as being anticipated by Hatakeyama is respectfully requested.

The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the references used in the rejection of claims 1, 6, 9-16, and 21-23.

35 U.S.C. §103 Rejections

Claims 4, 5, 9, 19 and 20 stand rejected under 35 USC §103(a) as being unpatentable over Hatakeyama in view of U.S. Patent No. 6,018,733 Kirsch. This rejection is traversed for the following reasons. Claims 4 and 5 are dependent on claim 1, claim 9 is dependent on claim 6, and claims 19 and 20 are dependent on claim 16. Therefore, claims 4, 5, 9, 19, and 20 are allowable for at least the same reasons as previously discussed regarding independent claims 1, 6 and 16.
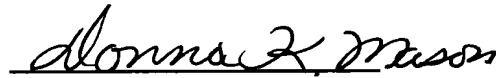
Accordingly, reconsideration and withdrawal of the 35 USC §103(a) rejection of claims 4, 5, 9, 19 and 20 as being unpatentable over Hatakeyama in view of Kirsch are respectfully requested.

In view of the foregoing amendments and remarks, applicants submit that claims 1, 6, 9-16, and 21-23 are in condition for allowance. Accordingly, early allowance of claims 1, 6, 9-16, and 21-23 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time

under 37 CFR 1.136. Please charge any shortage in fees due in connection

with the filing of this paper, including extension of time fees, or credit any

overpayment of fees, to the deposit account of MATTINGLY, STANGER,

MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417

(1021.40599X00).

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